

## **REMARKS**

Claims 1-8 are now pending in the application. Claims 1, 5-6, and 8 are amended herein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 102**

Claims 1-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Takizawa et al. (U.S. Pat. No. 6,357,849). This rejection is respectfully traversed.

Claims 1, 5-6, and 8 of the present invention each call for all of the following features (a) to (c):

- (a) Settings are adjusted so as to satisfy the conditions  
$$D/2 + d/2 \leq L, \text{ and } H \leq D.$$
- (b) A plurality of discharge nozzles are all aligned in an alignment direction parallel to the direction of movement of the discharge head.
- (c) The discharge nozzles discharge the droplets at a same time and at a predetermined interval.

Applicants submit that Takizawa et al. does not disclose the subject matter of the above-mentioned feature (a) as claimed in the present application. The Examiner has considered that “ $D \sin \theta$ ” of Takizawa et al. is the distance between the discharge nozzles in the direction of movement of the discharge head. However, “ $D$ ” of Takizawa et al. is the distance between the discharge nozzles in the direction orthogonal to the movement of the discharge head (see Fig. 2), so “ $D \sin \theta$ ” is the distance between the

discharge nozzles in the direction of the width of the laser beam. In addition, since Takizawa et al. does not disclose or suggest the diameter of the ink droplets, Takizawa et al. does not disclose or suggest that the distance between the discharge nozzles in the direction of movement of the discharge head is greater than the sum of half the diameter of the laser beam and half the diameter of the ink droplets, rather Fig. 22 of Takizawa et al. shows that half of the diameter of the laser beam is greater than half of the diameter of the ink droplet.

Furthermore, Applicants submit that the specific values of the laser beam diameter and the pitch of the discharge nozzles of Takizawa et al. cited by the Examiner are disclosed with reference to a first embodiment of Takizawa et al. See page 3 of the Office Action and column 9, lines 40-41 of the Takizawa et al. reference. Additionally, Applicants submit that ink droplets are only shown in Figure 22 of Takizawa et al. and that Figure 22 is disclosed with reference to a third embodiment of Takizawa et al. See at least Figure 22 and column 10, line 43 to column 17, line 60 of the Takizawa et al. reference. Moreover, Applicants submit that Takizawa et al. is silent with regard to the values of the diameter of the laser beam, the size of the ink droplets, and the distance between the nozzles of the third embodiment. Therefore, Applicants submit that Takizawa et al. does not disclose a single embodiment with a diameter of the beam of a detection light, a diameter of droplets, and a distance between discharge nozzles in the direction of movement of a discharge head having values which satisfy the relationship claimed in the present application.

Therefore, Applicants submit that the above-mentioned feature (a) of the present invention is not disclosed by Takizawa et al. Accordingly, for at least these reasons, Applicants submit that claims 1, 5-6, and 8 are not anticipated by Takizawa et al.

Applicants also submit that Takizawa et al. does not disclose the above-mentioned feature (b) as claimed in the present application. Applicants submit that in all embodiments of Takizawa et al. the ink jet head includes at least one nozzle array aligned so as to intersect the main scanning direction. See at least Figures 8-13 and 18-20 of the Takizawa et al. reference. Thus, Applicants submit that Takizawa et al. does not disclose a plurality of discharge nozzles that are all aligned in an alignment direction parallel to the direction of movement of the discharge head. Accordingly, for these additional reasons, Applicants submit that claims 1, 5-6, and 8 are not anticipated by Takizawa et al.

Furthermore, Applicants submit that Takizawa et al. does not disclose the above-mentioned feature (c) as claimed in the present application. For example, Takizawa et al. states that "[i]n another preferable application of the present invention, all nozzles included in one specific nozzle array *to successively eject ink droplets* in the inspection from an intersection of the light beam with an ink droplet ejected from a nozzle at one end of the specific nozzle array to an intersection of the light beam with an ink droplet ejected from a nozzle at the other end of the specific nozzle array." See column 3, lines 23-29 of the Takizawa et al. reference (emphasis added). In another example, Takizawa et al. discloses dividing nozzles on a print head into inspection groups and inspecting each group for ejection. See at least column 14, line 15 to column 15, line 57

of the Takizawa et al. reference. Accordingly, for these additional reasons, Applicants submit that claims 1, 5-6, and 8 are not anticipated by Takizawa et al.

Claims 2-4 and 7 all depend from one of claim 1 and claim 6 and, therefore, for at least the same reasons stated above with respect to claims 1 and 6, should also be patentable.

Applicants, therefore, respectfully request reconsideration and withdrawal of the rejection.

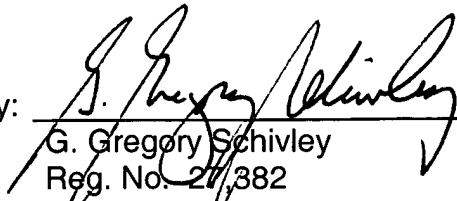
#### **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner

believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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